



# **NOAA**

# **Environmental, Health and Safety Report FY06**

December 2006 "S. Safety Seagull" **Contents** NOAA Chief Administrative Officer EHS Commitment........... 2 Accident Statistics ...... 4 NECSAS (NOAA Environmental Compliance and Safety Assessment System)... 5 EHS Program Initiatives ...... 6 FY07 EHS Goals and Action Plans – Highlights...... 9

### **NOAA Under Secretary EHS Commitment**

It is important that we renew our commitment to placing the highest priority on safety, health and the environment in the workplace, and during our activities and operations. Adherence, individually and collectively, to sound safety, health and environmental procedures and practices must be a precondition to all that we do on a daily basis.

I reemphasize to all NOAA team members that people are our most important resource. I ask that each and every member of the NOAA community personally reaffirm your commitment to promoting safe and healthy conditions for yourselves and every member of your work unit, regardless of whether it be in the workplace or elsewhere.

Many thanks for your attention to this most important issue.



Conrad C. Lautenbacher, Jr. Vice Admiral, U.S. Navy (Ret.) Under Secretary of Commerce for Oceans and Atmosphere

Memorandum for all NOAA employees, Dated 19 Aug 2002

## **NOAA Chief Administrative Officer EHS Commitment**

NOAA's comprehensive Environmental, Health and Safety (EHS) program is committed to achieving high standards of environmental quality, and providing a healthful and safe workplace for our employees, contractors, and communities.

We will comply with all applicable regulatory requirements as a minimum, and implement programs and processes to achieve greater protection, where appropriate. We will work with our stakeholders to develop responsible practices and procedures that provide safeguards for the community, the workplace, and the environment while providing flexibility to meet the needs of the NOAA mission.



We will establish and maintain appropriate controls, including periodic review, to ensure that this policy is being followed.

William F. Broglie Chief Administrative Officer

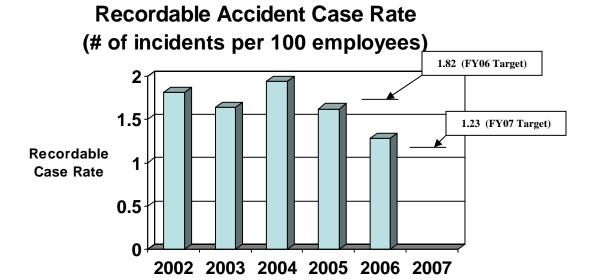
Key Indicators	
2006 Performance Against Ongoing EHS To	argets

Goals	Target	Status	
	Continue to reduce employee reportable and lost time incidents.	FY06, achieved a 1.28/1.82 (actual/target) reportable incident rate¹ and a 0.56/0.71 (actual/target) lost time incident rate¹.	
Prevent all injuries in the workplace.	Provide safety training to mid-level and senior managers, and safety awareness training to all employees.	DuPont safety training was provided to mid-level and senior managers, achieving a 99.6% completion rate, and safety awareness training was offered to all employees, achieving a completion rate of 98.8%.	
	Implement "Assessment of NOAA Safety Program and Culture" report recommendations. (Published March 2004).	Implemented 50% of the report recommendations, to date.	
Provide a Best In Class Safety Program for our employees	Develop & Implement a NOAA Incident Investigation Program	In November of FY06 the NOAA Safety Council adopted NOAA's Incident Investigation Program. Two incidents were formerly investigated in FY06: Keta boating mishap and MOC-P pier fire.	
Be an environmental, health and safety leader in the government and our communities.	Continue NOAA Environmental Compliance and Safety Assessment System (NECSAS) Tier I and Tier II assessments at NOAA facilities.	In FY06, Tier I assessments were conducted at 10 facilities within the Southeast and Gulf zones in accordance with the established perpetual calendar. Tier II assessments were conducted at 16 NOAA facilities across the country.	
	Continue to develop an Environmental Management System (EMS) <sup>2</sup> for appropriate NOAA facilities.	For FY06, 7 additional sites self-declared their EMS, raising the NOAA total to 8. The NMAO Marine Operations Center – Atlantic (MOC-A), and 6 NOS National Centers for Coastal Ocean Science (NCCOS) sites self-declared, joining the NMAO Marine Operations Center – Pacific (MOC-P), which was the first NOAA site to self-declare its EMS in May 2005.	
	Promote sustainable design and construction standards for NOAA facilities.	NOAA currently has two certified Leadership in Energy and Environmental Design (LEED) <sup>3</sup> buildings. During FY06 NOAA took occupancy of the Nancy Foster Complex which was constructed per U.S. Green Building Council principles. Seven more construction projects following Green Building principles are underway.	
	Conserve energy and support renewable energy sources.	In FY06, NOAA completed 15 projects which significantly reduced energy usage and/or harmful emissions.	
	Promote recycling efforts at all NOAA facilities.	In FY05, approximately 98% of NOAA facilities had an active recycling program, and an estimated 1,631 tons of materials were recycled.	

¹ Incident rate = # of incidents per 100 employees
² http://www.seco.noaa.gov/ENV/EMS/EMS\_index.html
³ http://www.usgbc.org/

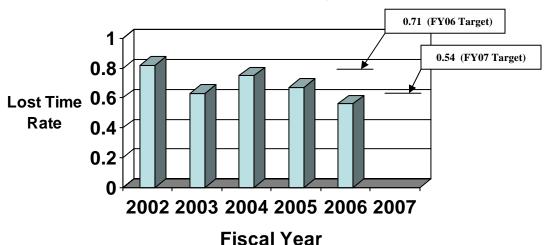
#### Employee Recordable and Lost Time Accidents

For FY06, NOAA has achieved reductions in reportable and lost time accidents. For FY06, a 1.28 reportable incident rate has been achieved against a target rate of 1.82. Additionally, a 0.56 lost time incident rate has been achieved against a target rate of 0.71. NOAA's recordable and lost time rates are reductions from FY05. For general reference, NOAA's is below the total Federal Government FY05 recordable and lost time case rates of 4.9 and 1.99, respectively.



**Fiscal Year** 

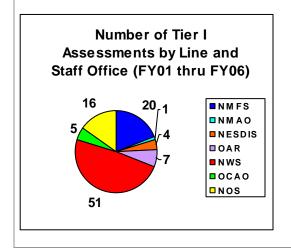
Lost Time Case Rates (# of incidents per 100 employees)

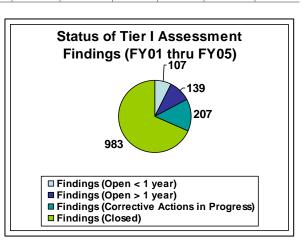


#### **NECSAS**

NOAA conducted both Tier I (conducted by a third party) and Tier II (conducted jointly by a NOAA safety manager and environmental compliance officer) NOAA Environmental, Health and Safety assessments during FY06. Prior to FY05, Tier II assessment findings were not tracked at the program level and the written reports were not standardized. Tier II assessment findings are now tracked at the program level, along with the Tier I assessments.

Number of NOAA Environmental Compliance and Safety Assessment System (NECSAS) Assessments Conducted								
Fiscal Year	2001	2002	2003	2004	2005	2006		
NECSAS Tier I Assessments	14	11	22	25	22	10		
NECSAS Tier II Assessments	7	18	11	2	15	16		
Combined NECSAS Assessments	21	29	33	27	37	26		





Status of NOAA Tier I Assessment Findings Accumulative Totals Beginning in FY01 thru:	FY05	FY06		
Findings (Open)	268	246 *		
Findings (In-Progress)	157	207		
Findings (Closed)	771	983		
Total Findings	1196	1436		
Percentage of Findings Closed	64%	68%		

<sup>\*</sup> Of the 246 open findings 107 have been open < 1 year and 139 > 1 year.

#### **Notices of Violation (NOVs):**

Unfortunately, NOAA received two NOVs in FY06. Both of these were received in June 2006. The first cited NOAA's Milford, CT Laboratory with exceeding their effluent limitations for discharge to Milford harbor. The second cited NOAA's Narragansett, RI laboratory for exceeding the Town of Narragansett maximum local limit for oil and grease to the local water treatment facility.

#### **EHS PROGRAM INITIATIVES**

#### On-Line Safety Training

In FY06, NOAA's Safety and Environmental Compliance Office (SECO) continued to sponsor web based new employee safety awareness training. 98.8% of all NOAA employees have completed this training. SECO is developing an abridged on-line EHS training course for deployment during FY07 to complement the existing Stop Taking Avoidable Risks (STAR) training. Additionally, the Environmental Compliance and Safety (ECS) Training Team has made many of the regulatory required EHS training courses into on-line training courses to support more cost effective and efficient EHS training.

#### NOAA-Wide Safety Council

The NOAA Safety Council, established in 2004 to coordinate safety activities among the line and staff offices, held monthly meetings during FY06. The Council is chaired by the Chief Administrative Officer and attended by Senior Line Office managers.

#### Managers Safety Training

NOAA Senior Manager, provided by DuPont Safety Training, and STAR (Stop Taking Avoidable Risks), provided by SECO, safety classes were made available and offered to NOAA managers throughout FY06 and this effort will continue into FY07. During FY06, 40 managers and 20 supervisors completed the DuPont and STAR training, respectively. These informative classes reminded managers of their responsibilities for employee safety.

#### Risk Management Procedures/Training

In FY06, NOAA safety managers provided 14 risk management training sessions for NOAA line and staff office employees who then used the knowledge gained from this training to complete internal risk management analyses for their operations. These risk management analyses evaluated the hazards associated with a variety of NOAA operations ranging from the handling of firearms for bear safety in Alaska, light detection and ranging (LIDAR) laser operations, the NOAA diver training program, vehicle operations, and others. Since this was a notable success of FY06, this effort will be continued in FY07.

#### NOAA Ship Safety Stand-downs

NOAA Marine and Aviation Operations (NMAO) performed three safety stand-down days aboard each NOAA ship in FY06. The stand-down days focused on safety with discussions and activities on risk management, reviews of standard operating procedures, lessons learned, shipboard emergency drills, and training.

#### Aviation Safety Program

NOAA Administrative Order (NAO) 209-124, Aviation Safety Policy, was completed and formally issued in June 2006. Implementation of the provisions of this NAO will continue into FY07.

#### Small Boat Safety Program

A NOAA Small Boat Safety Board was established at the working level to facilitate implementation and compliance with NAO 217-103, Management of NOAA Small Boats. Implementation of the provisions of this NAO will continue into FY07.

#### Diving Safety Program

Since the NOAA diver training program began in 1973, only 19 students have reported symptoms consistent with decompression illness (DCI). However since three minor DCI events were reported during the September 2005 class, the NOAA Diver Training Program decided to conduct a NOAA risk management study of diver training. This detailed risk management review was completed by experts from inside and outside of NOAA, and although no problems were cited, several recommends were developed. While implementing the entire risk management plan will extend into FY07, no cases of DCI have been reported since implementation of the initial recommendations.

#### EHS Newsletter

In an effort to communicate "hot" EHS topics to employees, NOAA line and staff office employees submitted several articles for the quarterly NOAA EHS newsletter which is prepared and published by SECO.

(Copies of past newsletters can be found at <a href="http://www.seco.noaa.gov/Safety/Newsletter.htm">http://www.seco.noaa.gov/Safety/Newsletter.htm</a>)

#### Environmental Management System (EMS)

During FY06, NOAA increased its number of sites which self-declared their EMS from one to eight. The additional sites to self declare include the NMAO Marine Operations Center – Atlantic (MOC-A), and six NOS National Centers for Coastal Ocean Science (NCCOS) sites. These seven additional sites join the NMAO Marine Operations Center – Pacific (MOC-P) as NOAA sites which have self-declared their EMS. The NMAO MOC-P was the first NOAA site to self-declare its EMS in May 2005.

MOC-A was awarded a Chesapeake Businesses for the Bay (B4B) award, under the B4B federal facility category, for their work related to EMS, pollution prevention, recycling, energy conservation, and habitat restoration at their site. There was significant competition, especially among federal facilities for the award. (Additional information on NOAA EMS can be accessed at

http://www.seco.noaa.gov/ENV/EMS/EMS\_index.html)

#### Sustainable Design

NOAA continues to support sustainable design, primarily by incorporating sustainable design principles into the design of new structures. To date, two NOAA buildings are LEED certified and an additional five certifications are expected prior to or during FY08. (Additional information on NOAA sustainable design efforts can be accessed at <a href="http://www.seco.noaa.gov/Energy/LEED\_index.html">http://www.seco.noaa.gov/Energy/LEED\_index.html</a>)

#### Energy Usage Reduction

15 energy projects designed to significantly reduce energy usage and/or harmful emissions were documented for FY06. Two of the innovative and far reaching projects include conversion from traditional to bio-based fuels and lubricants for marine vessels operating at the NOAA Research Great Lakes Environmental Research Lab (GLERL), Muskegan, Michigan (used 4,160 and 16,750 gallons of B100 bio-diesel in FY05 and FY06, respectively), and on a nationwide basis NOAA Weather Service reduced the required monthly testing run-time for emergency engine generators from 1 hour to ½ hour. Other projects include, using fuel cells for electrical backup power, upgrading electrical duct heaters with silicon controlled rectifiers, and replacing existing lighting with more efficient compact fluorescent bulbs and T8 compact fluorescent light tubes. (Additional information on NOAA's energy successes can be accessed at <a href="http://www.seco.noaa.gov/Energy/index.html">http://www.seco.noaa.gov/Energy/index.html</a>)

#### Safety Seagull

In FY06, NOAA SECO introduced the mascot "S. Safety Seagull" to provide safety tips for NOAA employees and contractors. In FY06, there were seven safety tips published and distributed, via NOAA-wide E-mail, by Safety Seagull.



#### Recycling

NOAA has an estimated 810 locations with an active recycling program (98% of NOAA sites). Although the FY06 data is not yet available, NOAA recycled an estimated 1,631 tons in FY05. The trash generated by NOAA in FY05 was approximately 3,802 tons.

#### NOAA Incident Investigation Program

In November of FY06, NOAA's Safety Council adopted a major incident investigation program modeled after the National Transportation Safety Board and the Department of Defense. This program automatically initiates a major incident investigation when certain conditions occur. These conditions were triggered on July 5, 2006 at NOAA's Marine Operations Center – Pacific facility in Seattle, WA and an incident investigation was completed. At the request of a Line Office, a major incident investigation was also

conduct in response to a small boat incident (Keta) on the Columbia River. (Additional information on NOAA Incident Investigation Program can be accessed at <a href="http://www.seco.noaa.gov">http://www.seco.noaa.gov</a>.)

#### NOAA Environmental Health and Safety (EHS) Workshop

During April of FY06, SECO held a week long EHS workshop. This workshop addressed many of the topics of concern within EHS, provided guidance and updates regarding specific NOAA efforts in many of the EHS areas, provided a forum for members of NOAA at all levels to talk and develop the broad planning goals needed to coordinate future efforts across NOAA. Due to the success of this event, it will be continued in FY07. (Additional information on NOAA's EHS Workshop, including the presentations and papers provided, can be accessed at http://www.seco.noaa.gov.)

#### FY07 EHS Goals and Action Plan - Highlights

Each NOAA Line Office develops detailed EHS Action Plans each year after carefully;

- 1) Reviewing their incident rates, with particular attention on their most common types and causes of injuries,
- 2) Accessing their areas of environmental compliance concern, and
- 3) Discussing their EHS goals for the future with their employees and management.

In addition to Line Office level EHS Action Plans many NOAA Programs and Offices develop action plans to advance EHS within their program and office, and in fact most of the success stories contained within this report are the direct result of those local and individual efforts to advance EHS throughout NOAA.

Some of those noteworthy efforts proposed for FY07, but by no means all of them, are:

- Expanding risk management evaluations to enable managers to make more informed judgments to support NOAA's mission without exposing employees to unreasonable risks.
- Improving NOAA's on-line incident reporting system to increase the ease of reporting, reduce the number of required forms, and provide for the improved ability to update the information and quickly identify trends or situations which might require immediate management attention.
- Expand NOAA's continuing effort to prevent mishaps by learning more about the
  causes of these mishaps through expanded efforts to conduct more detailed
  investigates into the causes of the incidents. The desired output of these incident
  investigations continues to be focused on yielding lessons learned which will
  prevent future incidents.
- Increasing management and employee awareness of the hazards within the work place while also providing ways to reduce those hazards.